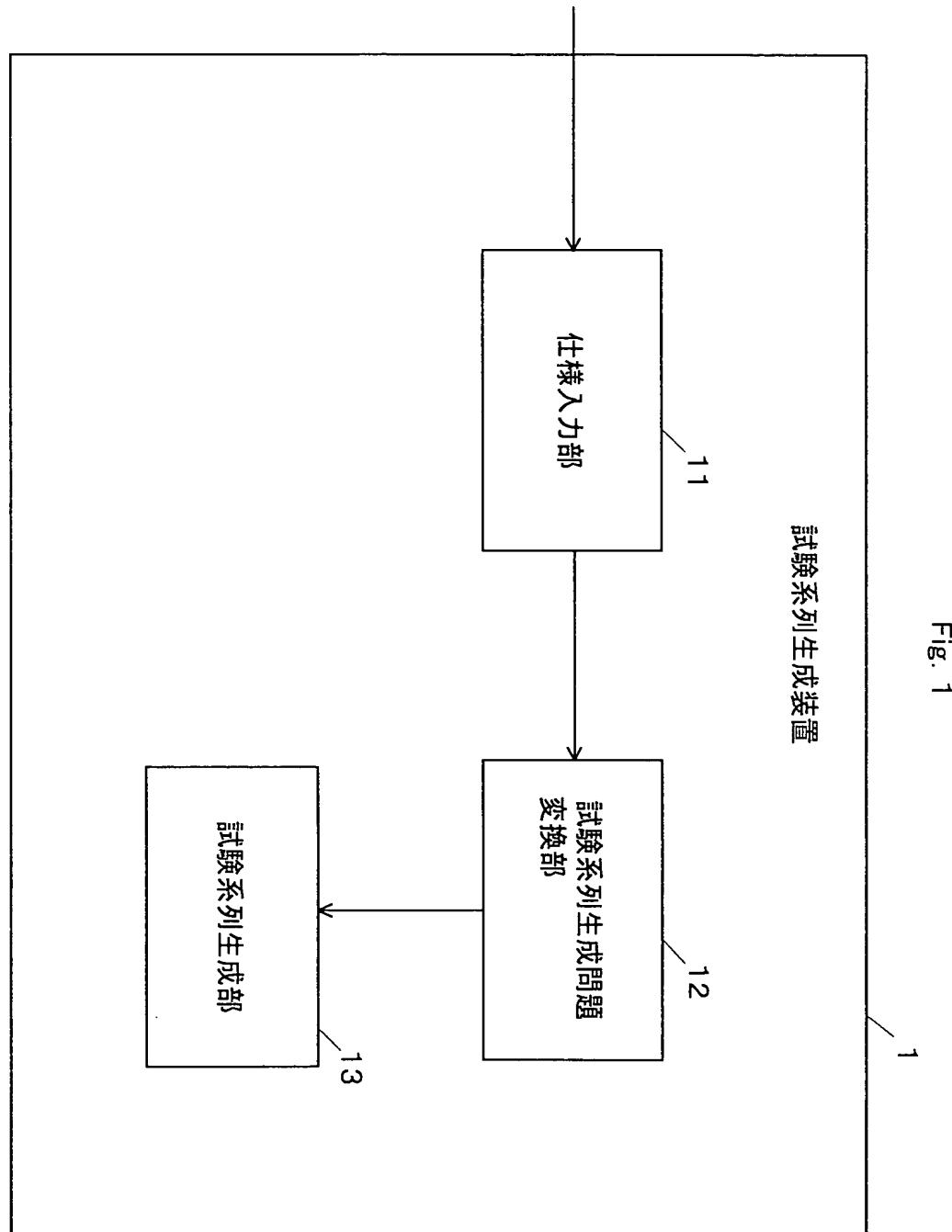


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Fig. 2

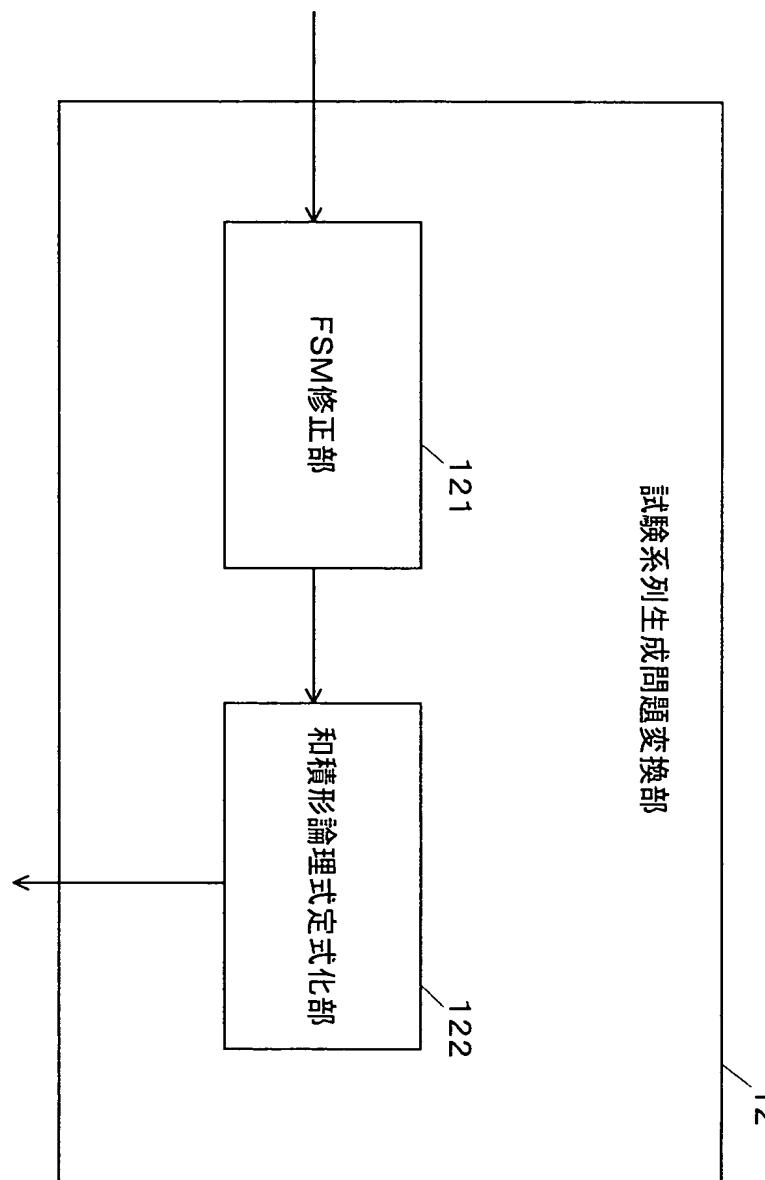


Fig. 3

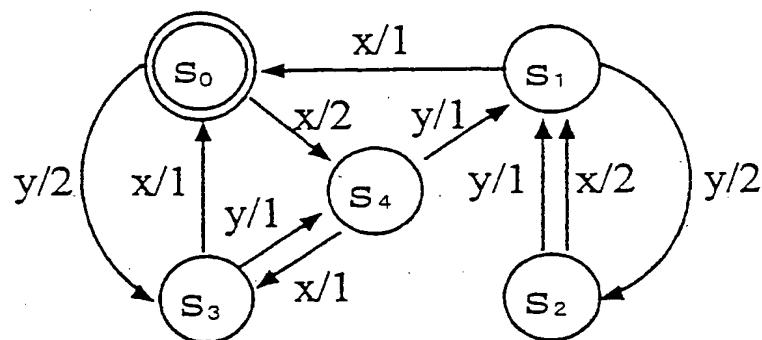


Fig. 4

状態(s_i)	UIO系列
s_0	$(y/2)(x/1)$ $(x/2)(y/1)$
s_1	$(y/2)(x/2)$
s_2	$(x/2)(y/2)$
s_3	$(y/1)(y/1)$
s_4	$(x/1)(y/1)$

Fig. 5

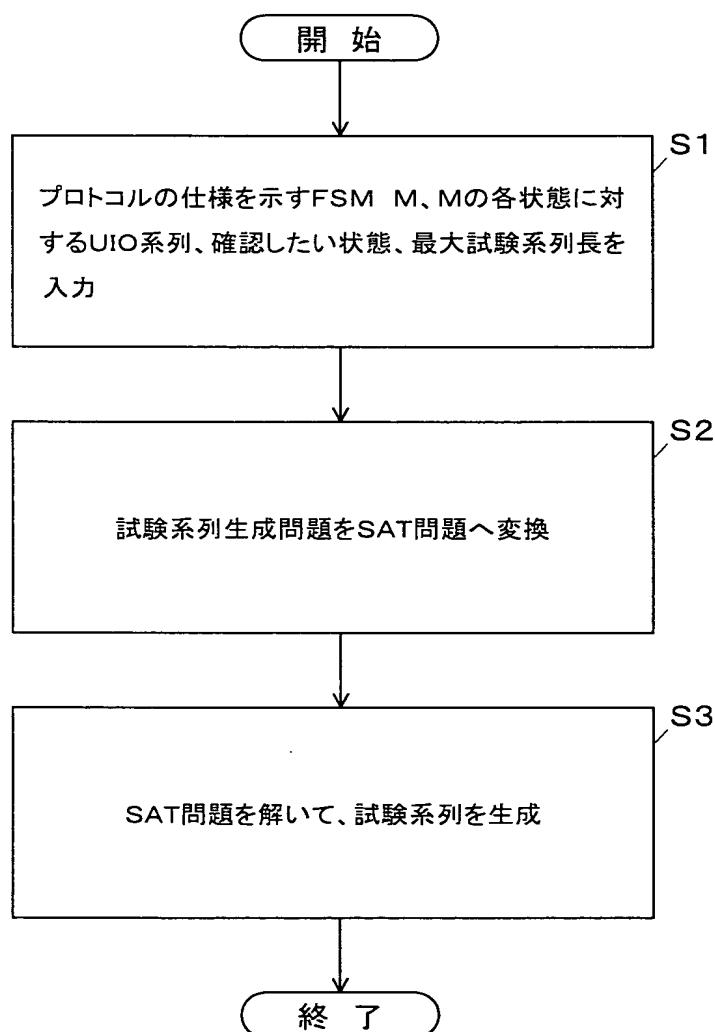
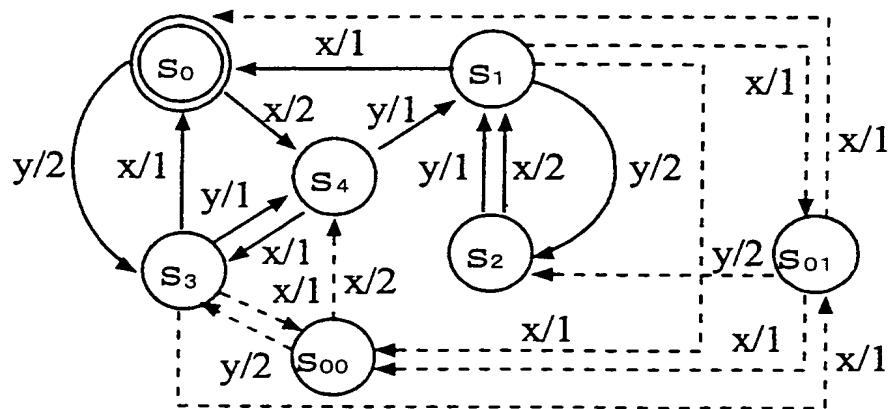


Fig. 6

```
1   $H' = \emptyset, I' = \emptyset$ 
2  for  $s_{ij} \in S'$  {
3      if  $i == 0$  then  $I' = I' \cup \{s_{ij}\}$ 
4      for  $s \in S \cup S'$  {
5          if  $(s, s_i, x, y) \in H \cup H'$  then
6               $H' = H' \cup (s, s_{ij}, x, y)$ 
7          if  $(s_j, s, x, y) \in H \cup H'$  then
8               $H' = H' \cup (s_{ij}, s, x, y)$ 
9      }
10 }
```

Fig. 7



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Fig. 8A

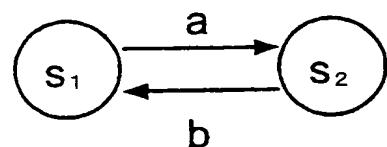
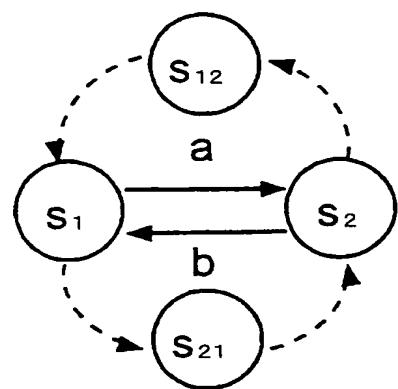


Fig. 8B



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Fig. 9A

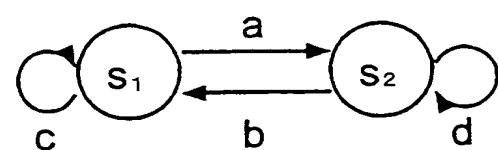


Fig. 9B

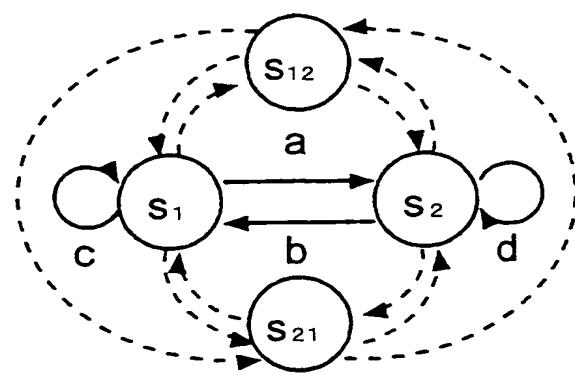
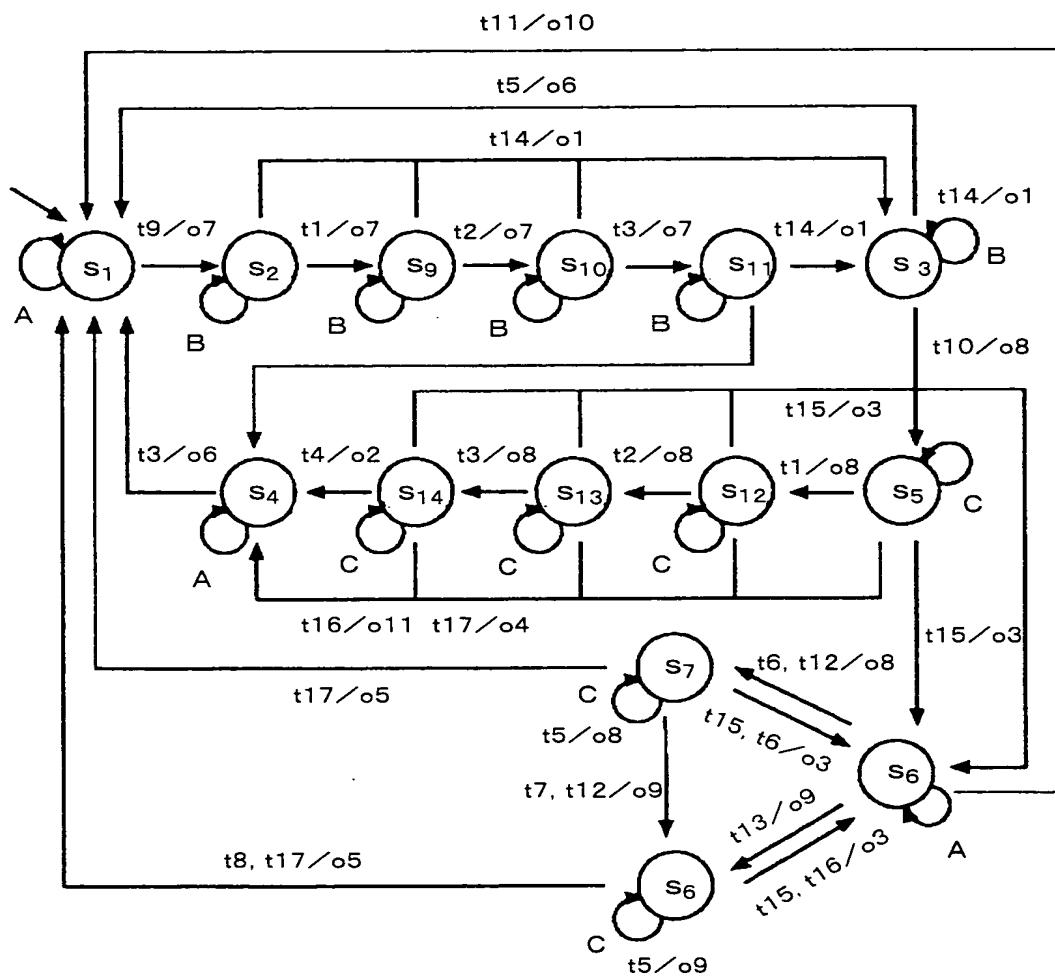


Fig. 10



A: $t_{14}, t_{15}, t_{16}, t_{17}/\text{null}$

B: $t_{15}, t_{16}, t_{17}/\text{null}$

C: t_{14}/null

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Fig. 11

	変数の数	節の数	試験系列長
実験1	24	77	15
実験2	41	210	15
実験3	21	72	13
実験4	33	171	13

Fig. 12

UIO系列数	変数の数	節の数	論理式生成時間(秒)	SATsolver実行時間(秒)
18	422	6668	0. 02	0. 37
14	369	5137	0. 01	0. 23
28	482	9960	0. 02	0. 70
42	653	17996	0. 03	2. 40

Fig. 13

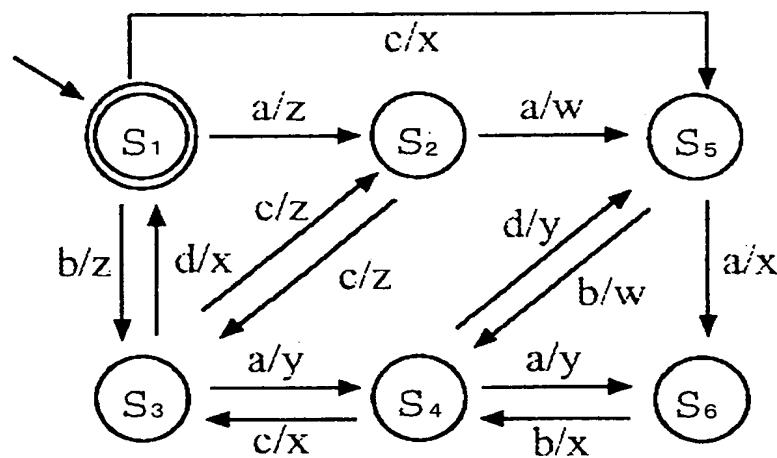


Fig. 14

状態(s _i)	UIO系列
s ₁	(a/z)
s ₂	(a/w)
s ₃	(a/y) (a/y)
s ₄	(a/y) (b/x)
s ₅	(a/x)
s ₆	(b/x)

Fig. 15

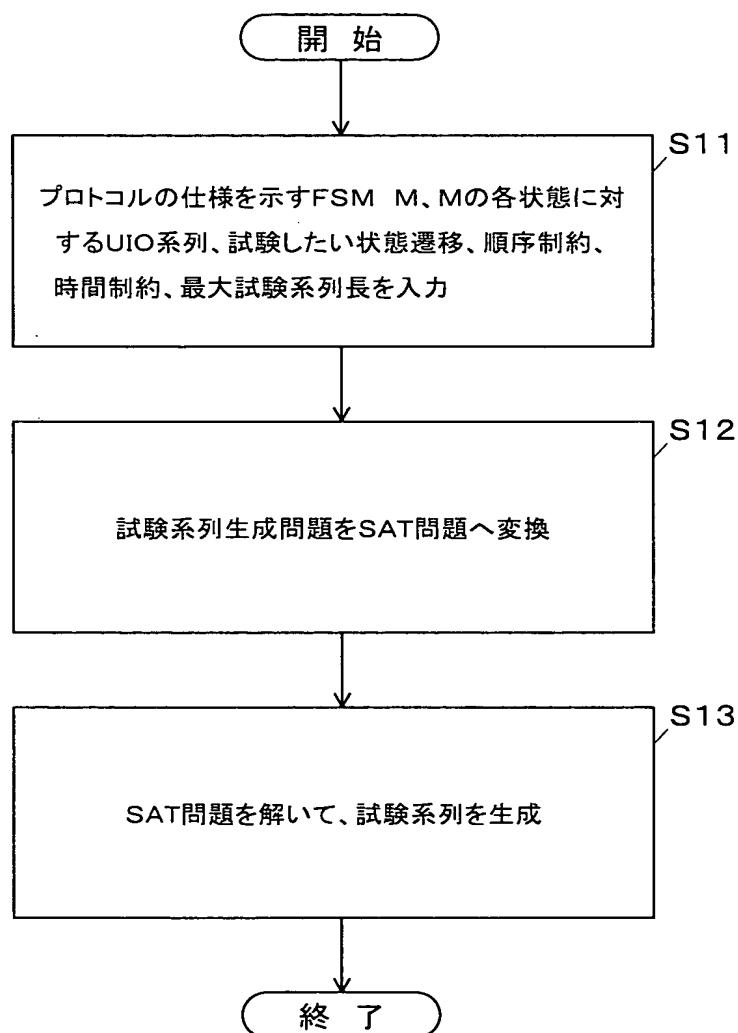
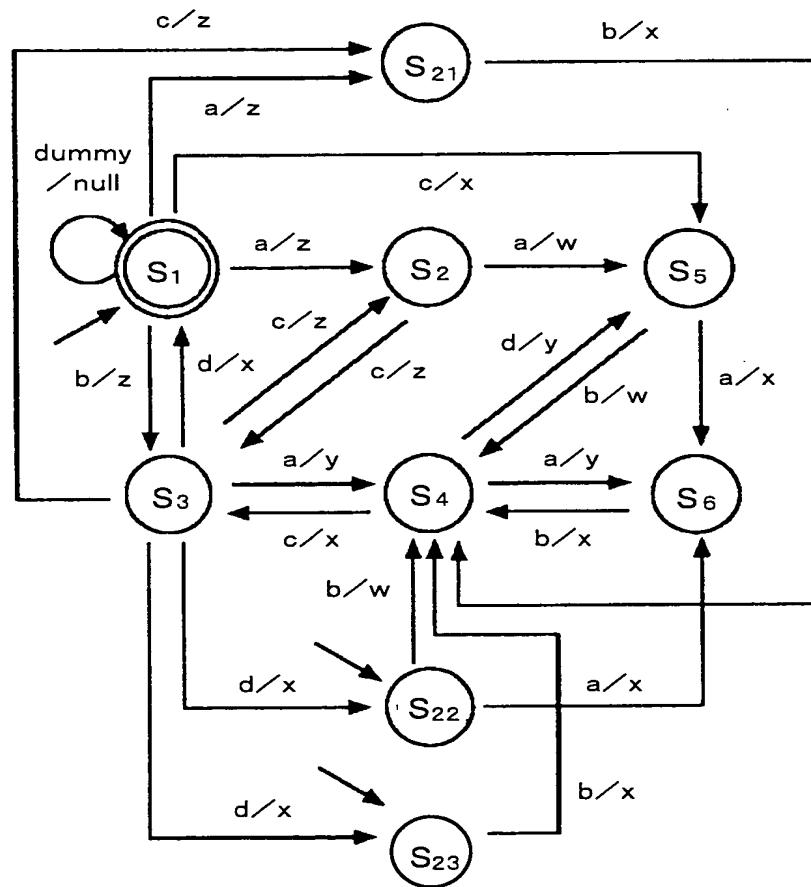


Fig. 16



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Fig. 17

部分系列数	系列長	変数の数	節数	実行時間
30	31(122)	1307	28879	6. 766
45	57(202)	3270	96976	19. 766
60	62(248)	4473	166072	48. 953
70	75(295)	6169	260095	102. 724
77	91(342)	8135	371643	345. 615

Fig. 18

部分系列数	系列長	変数の数	節数	実行時間
30	31(122)	1307	29747	5. 360
45	57(202)	3270	100054	19. 711
60	62(248)	4473	169730	48. 799
70	75(295)	6169	265495	112. 333
77	91(342)	8135	379651	367. 433

Fig. 19

重複条件	系列長	変数の数	節数	実行時間
なし	91(342)	8135	371643	345. 724
条件1	74(321)	7609	399727	262. 744
条件1, 2	71(313)	7714	427961	308. 868

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Fig. 20

系列長	部分系列数	変数の数	節数	実行時間
74	77	7609	399727	262. 744
76		7819	410857	207. 930
80		8239	433117	214. 773
90		9289	488767	267. 234
100		10339	544417	324. 324